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As we go to press it seems likely that this journal will resume its usual appearance next week. As soon as printing conditions become normal we shall do our best to make up for the delays in publication during the past few months. Meanwhile we are grateful to our contributors and advertisers for the forbearance every one of them has shown; and we must also (though with slightly mixed feelings) thank those readers who have expressed themselves as wholly satisfied with the few pages we have been able to offer.

After Gastrectomy

THOUGH the results of gastrectomy vary, it would probably be fair to say that 95% of patients survive the operation, 75% are relieved of their old symptoms without acquiring new ones that bother them, and 20% have further symptoms due either to recurrent ulceration (3–4%) or to disturbance of alimentary function. Occasionally the functional disturbance is severe: thus a doctor who wrote in our Disabilities series said that if he had known about the attacks of extreme lassitude which were to follow his gastrectomy he would rather have kept his ulcer and borne its pain.[1]

MUIR[2] finds that, next to the much-debated dumping syndrome, the commonest postoperative trouble is failure to gain weight. Six months after gastrectomy, more than 40% of the 86 patients he investigated had lost half a stone of their preoperative weight, and some had lost much more. Often it was clear that this loss was due to "dumping"; the patients ate small meals to avoid discomfort. But in 7 cases there was no obvious reason, and 5 of these were found to have steatorrhœa. Actually, it is remarkable how many patients after gastrectomy "go off" fats, often finding that milk, especially if creamy, gives them diarrhœa. The causes of their disordered fat absorption seem to be much the same as those of dumping symptoms. The small intestine, faced with a rush of unpeptonised food, must attempt a hurried job of digestion and absorption for which it was not designed—it normally has its material doled out in small quantities. Moreover, the popular Billroth II type of operation may interfere with the free flow of bile and pancreatic juice. Its most usual variant requires the attachment of the afferent loop to the lesser curvature of the gastric stump, and at this point the afferent loop is kinked and may become partly obstructed. Then, in the words of MIMPRISS and BIRT,[3] "the meal may empty rapidly down the jejunum, although the bile and pancreatic juice are detained at the upper end of the intestinal tract." The effect of this on fat absorption is obvious, and its probability is underlined by those patients whose dumping syndrome is accompanied by vomiting of bilious fluid, unmixed with food, shortly after a meal. That gastrectomy may have yet more subtle effects on the biliary system (and therefore on fat absorption) is suggested by MAJOOR and SUREN'S[4] observation on the appearance of gall-stones after gastric resection. As MUIR remarks, further investigation of abnormalities in fat metabolism after gastrectomy is obviously needed.

While this evidence is accumulating, certain provisional measures seem likely to help. Most surgeons probably believe that in the Billroth II type of operation the afferent loop should still be attached to the lesser curvature of the gastric stump, so as to discourage filling of this loop and hence reduce one cause of dumping. But the higher the gastrectomy with this anastomosis the more acute will be the kinking of the afferent loop and the greater the likelihood of its retaining bile and pancreatic juice; and there are therefore advantages in a gastrectomy less radical than a subtotal removal. A further reason for preferring a two-thirds excision of the stomach to a more extensive ablation is that the gastric stump holds more food. On the debit side must be reckoned the higher incidence of recurrent stomal or jejunal ulceration. The late HEDLEY VISICK[5] reduced this complication to nil by his very radical operation; but his paper did not give details of the frequency and seriousness of postoperative dumping and weight loss; nor would his methods necessarily be so successful in the hands of surgeons without his exceptional skill and enthusiasm. The Billroth I technique of gastrectomy, in which the gastric stump is anastomosed to the duodenum, should avoid some of the troubles enumerated, because it does not disturb the flow of bile and because the capacity of the stomach cannot be reduced beyond a certain point if it is to be anastomosed to the duodenum. Unfortunately this technique is difficult and sometimes impossible with duodenal ulceration; but it would be interesting to have a follow-up, as detailed as MUIR'S, on a series of Billroth I operations, and to know how frequent are dumping and inability to maintain weight.

Gastrectomy is now done so often that its failures demand careful study. As HOSFORD[6] said when reviewing his gastrectomies, the truth is very elusive; and its capture here needs prodigious labours.

Annotations

PENICILLIN, RHEUMATISM, AND NEPHRITIS

WE recently concluded that penicillin can usefully be given to rheumatic subjects to prevent recurrent attacks of streptococcal throat infection; but there is less certainty about its power to reduce the likelihood of rheumatic sequels when it is given to patients whose throats are already infected.[7] Jersild's observations on glomerulonephritis were more encouraging, for he found no renal damage in 1000 cases of scarlet fever treated with penicillin.[8]

Weinstein et al.[9] doubt whether penicillin given during streptococcal infection will prevent either rheumatic fever or nephritis. In their uncontrolled series of 167 cases of scarlet fever, all treated with penicillin (about three-quarters of them within two days of the onset), rheumatic fever ensued in 12 (7·2%) and nephritis in 6 (3·6%). On the other hand, they think that in penicillin-treated patients both rheumatic fever and nephritis may take an attenuated or cryptic form—which may pass unnoticed in the absence of repeated laboratory investigations, including electrocardiographic and urinary studies. Of their 12 rheumatic patients only 5 had an appreciable rise in temperature when the rheumatic process

1. *Lancet*, 1949, ii, 907.
2. Muir, A. *Brit. J. Surg.* 1949, **37**, 165.
3. Mimpriss, T. W., Birt, St. J. M. C. *Brit. med. J.* 1948, ii, 1905.
4. Majoor, C. L. H., Suren, Th. J. J. *Ibid*, 1947, ii, 8.
5. Visick, A. H. *Lancet*, 1948, i, 505.
6. Hosford, J. P. *Brit. med. J.* 1949, i, 929.
7. Leading article, *Lancet*, July 22, 1950, p. 140.
8. Jersild, T. *Ibid*, 1948, i, 671.
9. Weinstein, L., Bachrach, L., Boyer, N. H. *New Engl. J. Med.* 1950, **242**, 1002.

seemed most active; in the other 7 "there was complete lack of febrile response at times when arthralgias were present, new murmurs were appearing and the electrocardiogram was showing progressive changes." In children, they insist, the joint disorder manifests itself less commonly as a polyarthritis than as an arthralgia, which may not be migratory and may affect only one joint. In only 1 of the 12 cases was the erythrocyte-sedimentation rate increased while the rheumatic process was thought to be active; and serological studies yielded inconstant evidence of antibody formation. Of the 6 patients with nephritis, only 1 had clinical manifestations; only 3 became febrile, and only 3 had an increased E.S.R.; and in not a single case was there serological evidence of antibody formation. If, as this paper suggests, the more serious complications of streptococcal infection may be masked rather than prevented by penicillin, children receiving such treatment will need more careful watching than most of them now receive.

CORTISONE AND INSULIN

A RECENT preliminary report [1] suggests that insulin has a 'Cortisone'-sparing action and that economy in cortisone dosage may be obtained by giving the two substances together. Unpublished observations by Seneca and Ellenbogen on the action of steroid hormones on adrenocortical enzyme systems in vitro provided the rationale for these studies; cortisone may effect the synthesis of a tissue carbohydrate, and insulin may enhance this activity and make activation products of glucose readily available for tissues without requiring conversion from amino-acids.

Observations were made on nine women and three men, with rheumatoid arthritis in various stages (I–IV [2]) and of various durations (6 weeks to 20 years). Glucose-tolerance tests were performed in all cases, and though the fasting blood-sugar was within normal limits there were cases in which return to the normal level was delayed. 12·5–50 mg. of cortisone acetate in an aqueous suspension and 20–60 units of plain insulin were then injected daily in single or divided doses during successive 10-day periods. No clinical improvement was noted during 10 days in four patients given 12·5 mg. cortisone and 20 units of insulin, but in six of eight patients given 25 mg. of cortisone and 40 units of insulin for 10 days a rapid fall in sedimentation-rate occurred, and four had definite signs of clinical reversal. All twelve patients were then given 50 mg. of cortisone and 40 units of insulin for 10 days, and during this period ten progressed to normal sedimentation-rates and eight to well-marked clinical reversals, grades I and II. The patients also gained 4–29 lb. in weight. This dose of 50 mg. of cortisone is only half the amount (100 mg.) usually given daily, and further clinical benefit seemed to be obtainable at a dosage of 25 mg. of cortisone and 40 units of insulin. Except possibly in one patient who developed œdema of the ankles, no side-effects attributable to cortisone were observed during the 30-day trial period. Hypoglycæmia was readily controlled and was not related to the degree of response.

Though Messrs Merck and Co. have recently reduced the price of cortisone from $95 to $50 per gramme,[3] treatment is still expensive. Henderson and his colleagues hope that critical evaluation of their work may establish a safer and more economical use of cortisone, and some explanation of its pharmacological action.

EFFECTS OF CLIMATE ON ANIMALS

IF cattle could be made to produce beef and milk in warm climates at something like the level attained in temperate climates, a great advance would be gained against undernourishment. To this end, many tropical countries have tried to improve their stock by importing productive animals from temperate zones, either for pure or cross breeding; but only brief increases in production are achieved before the imported stock and their cross-bred progeny show deterioration. Kelly suggested that the most useful thing to do would be to isolate studs of milking strains of tropical zebu cattle under European control in a country where the herds could be expanded free from disease and made available to countries that needed them; but J. D. Findlay and his colleagues at the Hannah Dairy Research Institute, while commending this proposal, think that the fundamental question of temperature regulation in cattle should also be studied. As a first step to such a study Findlay [1] has now reviewed existing knowledge.

In hot climates, he says, tropical cattle can graze longer than those imported from temperate climates, and simple field tests show that their body-temperatures are less influenced by high air-temperatures and humidities. Their respiration-rates are also less liable to increase, and by this criterion woolly coated animals are less able to tolerate heat than those with glossy coats. Contrary to what is found in man, the pulse-rate of cattle is increased by heat only as a prelude to complete breakdown under extreme conditions. The skins of tropical cattle often allow considerable water loss by diffusion, but it is still uncertain whether they are capable of active sweating. These and many other points of animal physiology require further investigation by the refined methods commonly used in human physiology. Much of our information about climatic effects on farm animals has been gained by simple methods, and though some of these are admirable for their purpose others are crude and inaccurate. For their own investigations the Hannah Institute staff built a psychrometric room, suitable for the study of one cow at a time, in which the temperature, humidity, and air movement may be varied independently and kept almost constant at any given level. This room and its adjacent observation chamber are equipped with the modern apparatus needed for accurate and continuous recordings of the environment and the cow's reactions.

One chapter of Findlay's monograph briefly surveys the effects of tropical environments on sheep, pigs, and domestic fowls. The pig is particularly sensitive to temperature changes, and it plays a larger part in the agricultural economy of Great Britain than of the Colonies. For this reason, perhaps, some recent studies [2] of its reactions to the Scottish climate were concerned with the effects not of excessive heat but of excessive cold.

THE C.H.S.C.

AT the Trades Union Congress on Sept. 5 Dr. H. B. Cardew, secretary of the Medical Practitioners' Union, said he would like to see the constitution of the Central Health Services Council revised so that it became a great parliament representing all the people in the National Health Service, including nurses and even cleaners. It should then be given wider functions as the permanent advisory planning commission. At present, he declared, there was no plan for the future development of the service as a whole.

DIAGNOSIS OF GASTRIC CARCINOMA

THE diagnosis of gastric carcinoma is often baffling until the surgeon intervenes or the march of the disease dispels all doubt. Papanicolaou's method of establishing the presence of malignancy by examination of exfoliated cells [3] has already proved of value in gastric cases [4]; and now, with his colleagues,[5] he has developed a refinement which seems to promise still greater accuracy. Broadly, this consists in producing mechanical irritation of the gastric mucosa by means of an inflatable balloon rendered abrasive by knots of untreated braided silk on its surface. Of 33 cases where the diagnosis was later established by operation or biopsy, 17 were malignant (carcinoma 14, Hodgkin's disease 2, reticulum-cell sarcoma 1), and 15 benign (polyps 2, gastric ulcers 10, gastritis 3); in 1 no lesion was demonstrated. Among the 17 cases of proved malignant disease, smears by washing the balloon after withdrawal yielded malignant cells in 14, suspicious cells in 1, and no malignant cells in 2 (those of Hodgkin's disease). The benign lesions produced no false positives.

This procedure appears somewhat heroic but it has not led to any hæmorrhagic or other serious complications—largely no doubt because it has not been used in the presence of supposed active upper gastro-intestinal bleeding, healing gastric perforations, œsophageal varices, or œsophageal obstruction. The results recorded are impressively better than those the same workers obtained on the same patients with routine smears from gastric aspirate.

1. Henderson, E., Gray, J. W., Weinberg, M., Merrick, E. Z., Seneca, H. *J. clin. Endocrinol.* 1950, **10**, 800.
2. Steinbrooker, O., Traeger, C. H., Batterman, R. C. *J. Amer. med. Ass.* 1949, **140**, 659.
3. See *Brit. med. J.* Sept. 2, 1950, p. 581.

1. The Effects of Temperature, Humidity, Air Movement, and Solar Radiation on the Behaviour and Physiology of Cattle and other Farm Animals. Bulletin no. 9 published by the Hannah Dairy Research Institute, Kirkhill, Ayr. 1950. Pp. 178. 6s.
2. See *Lancet*, 1950, i, 915.
3. See leading article, *Ibid*, 1948, i, 330.
4. See annotation, *Ibid*, p. 683.
5. Panico, F. G., Papanicolaou, G. N., Cooper, W. A. *J. Amer. med. Ass.* 1950, **143**, 1308.

WESTERN UNION

THE public-health committee of the Western Union Powers held a successful sixth session from Sept. 7 to 9 in Edinburgh. Mutual study of health services in relation to civil defence was begun, by the exchange of documents, visits of experts, and the establishment of a subcommittee which will meet in Brussels on Nov. 21. A uniform system of health control of sea traffic, similar to that already in force for air traffic, will begin on March 1, 1951. In practice this will mean that the relative freedom from control of ships arriving here from between Brest and the Elbe will be extended to the Atlantic and Mediterranean coasts of metropolitan France. The seventh session will be held in Marseilles on March 20.

COMPLICATIONS OF CARDIAC CATHETERISATION

THREE reports from the U.S.A. indicate that catheterisation of the heart, though usually accomplished without trouble,[1] may have unpleasant and even dangerous effects. Southworth et al.[2] report the case of a 25-year-old woman with congenital heart-disease in whom a catheter was advanced from the left femoral vein (the arm veins being unsatisfactory) into the right ventricle. Ventricular fibrillation started and continued for at least three-quarters of an hour, during which oxygenation was maintained by cardiac compression and artificial respiration. Normal rhythm was restored after administration of procaine hydrochloride and xylocaine hydrochloride with small amounts of adrenaline, and electric shock. Bruce et al.[3] record a case of cardiac enlargement and Wolff-Parkinson-White syndrome (abnormally short P–R interval, usually prolonged Q.R.S. complex, and history of recurrent paroxysmal tachycardia[4]) in which the introduction of the catheter from the right arm to the region of the tricuspid valve led to multifocal ventricular tachycardia. Nine hours later, after other measures had failed, atropine sulphate intravenously (0·0012 g.) promptly converted the ventricular tachycardia to a supraventricular tachycardia resembling auricular flutter, which changed to sinus rhythm with a normal rate. Lastly, Michel et al.[5] report that of 133 patients submitted under fluoroscopic control to cardiac catheterisation, usually under local anæsthesia, via the antecubital vein, 37% developed an arrhythmia. The incidence of arrhythmia was 19% with the catheter tip in the right atrium, 20% in the right ventricle, and 19% in the pulmonary arterial tree; and the incidence was higher in patients with congenital heart-disease and in those with pre-existing electrocardiographic abnormalities. The arrhythmia was transitory except in one case, in which the patient died. Here the catheter-induced arrhythmia, together with anæsthetic depression of the respiratory centre, may, it seems, have contributed to the fatal outcome.

PUBLICITY FOR CANCER

IN the *Medical Officer* for Sept. 9 Dr. Malcolm Donaldson raises again the question of more active instruction of the lay public on cancer and the advantages of early treatment. He points out that great numbers of people have erroneous ideas about the disease and are too much afraid of it, and he thinks that this fear is increased by being bottled up. "In America and some other countries," he says, "all 'taboos' concerning cancer have been removed, and people talk about it freely"; but in this country "scarcely any newspaper will mention the word 'cancer' unless some institution is prepared to pay heavily for an advertisement."

From this standpoint it is perhaps all to the good that *Picture Post*, a journal with an immense circulation, should have the courage to publish last week a long illustrated article on cancer. It is likely to weaken the taboo. But we could wish that the article were not devoted to the claims of an unorthodox method of treatment whose nature remains undisclosed and whose value is, to say the least, unproven. Since 1919 Mr. David Rees Evans has been using, with modifications, the "Cardigan cancer cure," which was brought before the public more than forty years ago; and since last November he has treated 16 cases at the Presbyterian Hospital, Newark, New Jersey. Anyone unfamiliar with the history of other cancer cures is likely to feel that the initial results in these cases, and the supporting data, make an authoritative investigation urgently necessary; but the medical profession has a well-founded objection to the treatment of patients with unknown remedies, and these objections are not entirely met by Mr. Rees Evans's willingness to "disclose the full details of his preparations and methods of treatment to a properly constituted committee, *following* tests under agreed conditions of control" (our italics). The first requirement seems to be a considered report from the American doctors who gave him facilities.

1. See leading article, *Lancet*, 1950, i, 863.
2. Southworth, J. L., McKusick, V. A., Peirce, E. C., Rawson, F. L. *J. Amer. med. Ass.* 1950, **143**, 717.
3. Bruce, R. A., Yu, P. N. G., Lovejoy, F. W. jun., McDowell, M. E., Pearson, R. *Circulation*, 1950, **2**, 245.
4. Wolff, L., Parkinson, J., White, P. D. *Amer. Heart J.* 1930, **5**, 685.
5. Michel, J., Johnson, A. D., Bridges, W. C., Lehmann, J. H., Gray, F., Field, L., Green, D. M. *Circulation*, 1950, **2**, 240.

Dr. H. MORLEY FLETCHER, consulting physician to St. Bartholomew's Hospital, died at his home at Petworth on Sept. 9, at the age of 85.

Reviews of Books

Recent Advances in Pharmacology (London: J. & A. Churchill. 1950. Pp. 418. 24*s*.).—To display the growing edge of a new science is by no means easy. Recent advances must in fact be recent enough to call for comment, yet a reasonable period must elapse before fresh claims can be related to the background of established knowledge. The publishers of this book may be congratulated on their choice of authors, for Prof. J. M. Robson, of Guy's Hospital Medical School, and Dr. C. A. Keele, of Middlesex Hospital Medical School, have produced a notable addition to pharmacological literature. They conduct the reader through the labyrinths of new knowledge of such substances as the anti-cholinesterase drugs, the anti-histamines, and the steroids of the gonads and adrenal cortex—to mention but 3 of the 18 chapters. The section on the mode of action of drugs is masterly, and that on the evaluation of the actions of drugs in man deserves the subtitle "statistics without tears." References are abundant and errors very scarce. The book is likely to be in great demand among students of pharmacology and postgraduates in general medicine.

Organic Chemistry (4th English ed. London: Cleaver-Hume Press. 1950. Pp. 983. 57*s*. 6*d*.).—Prof. Paul Karrer, of Zürich, is a mine of information about organic reactions and structure, but it is unfortunate that he records incorrectly, or discusses from outmoded angles, many points of particular interest to doctors. Thus, in the description of alcoholic fermentation the energetic aspects, including the rôle and production of A.T.P., are neglected; and Scottish readers will be horrified to read that whisky is made from maize or rye, neither of which is used in the production of "Scotch." There are some other biological mis-statements and omissions: no mention is made, for instance, of recent advances in the analysis of protein, carbohydrate, and carotenoid by the application of chromatography. It is to be hoped that in the next edition the more biological sections will be efficiently revised so as not to detract, as they do at present, from the value of the purely chemical information.

Modern School Hygiene (14th ed. London: James Nisbet. 1950. Pp. 480. 12*s*. 6*d*.).—This book by Dr. R. Gamlin, chief assistant school medical officer for Liverpool, is essentially a reference work on matters relating to the school medical service, and it is intended for teachers rather than doctors. It opens with a chapter on heredity, and chapters follow on elementary physiology and pathology and their applications in child health. These are lucid and to the point, but perhaps rather dogmatic: for example, the assertion that only full-cream dried milks should be used in infant feeding would not find general acceptance among clinicians. There are some good chapters on physically handicapped pupils, mental defectives, and educationally subnormal children, explaining the educational facilities for them under the Education Act. The common infectious illnesses are described; but a serious omission is the streptococcal throat, which, next to the common cold, is the commonest infection among school-children. The passages on poliomyelitis make no mention of abortive infections. The book concludes with an interesting chapter on school architecture, a short glossary of medical terms, and a bibliography. The author seems happier when dealing with the administrative than with the clinical aspects of school hygiene; but on the whole he does what he sets out to do for the school-teacher, and he provides some useful sections for the doctor concerned with education.

British Red Cross Society First Aid Manual, No. 1 (9th ed. London: Macmillan. Pp. 300. 3*s*.).—The first new edition of this famous manual for ten years has been largely rewritten, and, since the authors are Sir Harold Whittingham and Sir Stanford Cade, this has been done very adequately indeed. Material has been added to cover the needs of Civil Defence in air-raids, including atomic warfare, and there has been a welcome pruning of theory and concentration on the really practical aspects of the subject.

Introduction to Physical Biochemistry (2nd ed. London: Cassell. 1949. Pp. 246. 27*s*. 6*d*.).—This book, first published in 1941, has been considerably revised without structural alterations. The opening chapters are concerned with those physical properties of water, solutions, gases, and colloids which play an essential part in body processes, while later chapters discuss chemical equilibrium, buffer systems, respiratory functions of blood, oxidation-reduction systems, and the acid-base balance of the blood. The author, Prof. J. M. Johlin, of Vanderbilt University, might be more explicit in his references to "larger textbooks," but his book certainly forms a readable introduction to an aspect of biochemistry which can easily be made dull and unintelligible.

In England Now

What a week! Telephone ringing day and night. Brr... brr.....Brr...brr.....Brr...brr.....

From an Old Faithful.—"About this B.B.C. appeal. I'm a regular donor and should like to give my blood. My doctor says I'm a rare group."—"What is your group?"—"Group O Rh *minus*."—"Thank you very much for ringing us, but yours is not the exact group we want."

From a Facetious Houseman.—"Hullo! I've got the man you want."—"What man?"—"His group is CDECDE."—"Is it a big D or a little D?"—"I don't know what you mean. C for Caesar, D for Daddy, E for Erythroblastosis (Ha! Ha!)." "Damn it" said I, "is it a capital D or a small D?"—"I don't know: hold on and I'll find out." A minute or two later. "Sorry, one is a little D and"...(he bursts into song)..." the other is a BIG... BIG... D (Ha! Ha!)."

From a Very Superior Person.—"I've just been listening to my radio and I shouldn't reahlly mind giving a pint of my blood to that pooah woman."—"Yes, madam, and what is your group?"—"I reahlly don't know, but I am a reah type."

And so it went on, day after day, night after night, answering calls from the hopefuls, the enthusiasts, and the "rare" types—alphabetical explanations, permutations and combinations, the C's, the D's and the E's, the little C's, the little D's and the little E's. How the gods and Alexander Wiener must have laughed!

From Letters to the Editor

Intrathecal Tuberculin.—Though I do not wish to dispute the observations and conclusions of Dr. Smith and Dr. Vollum (Aug. 19), I think that an alternative and simple explanation of the dramatic recovery of these patients is possible and should be excluded before any large-scale trial of intrathecal tuberculin is undertaken. Choremis and Vrachnos (*Lancet*, 1948, ii, 408, 513) have emphasised the intense meningeal irritation which can be caused by intrathecal streptomycin, which may superimpose a chemical meningitis on an infective one. Increasing opisthotonos, repeated uncontrollable vomiting, and hydrocephalus due to subarachnoid block are results observed by Choremis following intrathecal injection of 100 mg. or more of streptomycin. It is perhaps significant that in Dr. Smith's cases tubercle bacilli were no longer to be found in the C.S.F. when intrathecal tuberculin was started, and even more so that it was only some days after all intensive intrathecal therapy had been discontinued that improvement took place. Furthermore, there was no opportunity of observing the possible deleterious effects of another course of intrathecal streptomycin during the surprisingly smooth convalescence of these two "hopeless" cases. Is it not possible that what actually happened was that the initial course of chemotherapy had to all intents and purposes replaced the tuberculous meningitis by a chemical one, and that this was being perpetuated, whether by streptomycin intrathecally or by the even more noxious tuberculin (P.P.D.)? When all intrathecal interference was discontinued, the meningeal irritation ceased and the patient recovered.—S. L. O. JACKSON, M.R.C.P. (Brompton Hospital, London, S.W.3.)

Teaching at Non-teaching Hospitals.—Whatever may have been the teacher's training, his success in imparting knowledge and understanding depends on his desire to teach, and his possession of an animating and dynamic force. The University Grants Committee warns against promotion based solely on research, rather than on personal qualities and teaching ability; yet how few excellent clinical teachers are so encouraged. I would plead for a return to teaching of the simple clinical methods; the inculcation into the student of the elemental necessity of training his senses; the assembling of the facts in a reasoned manner, and direction in the way of interpreting them along physiological and pathological lines. When these have been mastered, then is the time to fortify and confirm the clinical diagnosis by the ancillary investigations which it seems the student must know.

Clinical material in the teaching hospital is limited; but many men who have had experience in teaching hospitals occupy positions on the staffs of non-teaching hospitals, and efforts should be made to include them in the teaching of medicine. Not only students but also registrars could benefit from the teaching of some of those clinicians who may have hitherto thought themselves "out in the wilderness," and it is to be hoped that regional boards will have the vision to encourage a proportion of their registrars to go to non-teaching hospitals.—W. R. BLACK, F.R.C.S. (Weston-super-Mare.)

Preclinical Teaching.—Dr. Johnson (Aug. 26) quotes the Moran Committee as saying that the average medical graduate tends to lack curiosity and initiative and his powers of observation are relatively undeveloped. She then describes exercises aimed at forestalling these deficiencies, and calling for an effort by the student. But if it is important to train the student to observe it is even more important not to destroy his natural desire to learn. Often he feels frustrated by methods of instruction which, though ingenious, are remote from practical reality and encourage a curiosity to learn the "tricks" of examiners rather than to seek knowledge for its use in his future medical work. Clever exercises should not enable the lecturer and demonstrator to contract out of their liabilities to instruct; for personal example is the best means of inspiring and encouraging good habits. If the teachers themselves really show insight, method, enthusiasm, and powers of observation the student will follow their example. The closer the teacher-student relationship, the higher the quality of the learning and the greater the opportunity for initiative.—MEDICAL STUDENT.

Preclinical Education.—Dr. Johnson refers to the unscientific approach of students to scientific problems, and Dr. Dicks deplores the lack of the human aspect in preclinical training. It looks as though the student is to have two further calls on his time—discussion periods and anthropology. But the fault, and the opportunity for its remedy, are to be found at an earlier stage; for the neglect of the humanities and of a scientific attitude to scientific matters starts at school. This is not the fault of the teachers: it is the hospital and university entrance examinations which are at the root of the trouble. As long as it is possible to pass these with little more than a stock of factual knowledge, the schools will, and must, provide this first and foremost. As soon as a more general education becomes essential for passing these entrance examinations, much of the ground for Dr. Johnson's and Dr. Dicks's just criticisms will be removed.—JOHN L. STRUTHERS.

Antimalarial Drugs.—As you say (Aug. 19), quinine amblyopia is rare in West Africa. However, your remark that "it would be wrong to assume that blackwater has disappeared from West Africa since the almost universal application of mepacrine" calls for comment. It is true that blackwater fever has not entirely disappeared, but it has become strikingly uncommon despite the increase of the non-immune population in all four West African dependencies. In Nigeria during 1931–1942 the average number of cases was 15 per year in the non-African population averaging 6000; during 1943–49 the average number of cases was 6 per year in a population averaging over 8000; and during 1948–49 there were only 3 cases of blackwater fever in a population of about 11,000. Moreover, of these 3 cases of blackwater fever, 1 was in a patient known to take quinine as a suppressive. The decrease of the incidence of this disease in non-Africans from 1943 onwards coincided with the general substitution, first of mepacrine (1943) and then of proguanil (1947), for regular *suppressive* quinine. Treatment of acute malaria with quinine, alone or combined with other antimalarial drugs, is still favoured by many medical officers

in Nigeria, and there is no evidence that the *therapeutic* use of quinine had any bearing on the incidence of blackwater fever. The similarity of the above findings to those of Findlay in 1941–45 for European military personnel in West Africa is striking, and confirms the close relationships of this disease with suppressive quinine medication.—LEONARD J. BRUCE-CHWATT, M.D., senior malariologist, Nigeria.

The Napkinless Age.—I was interested to read (Aug. 12, p. 273) of the new plastic napkin containers, for use with cellulose disposable napkins. Similar containers have been on sale here in Switzerland, and I have been using them for my baby for the last eight months (since she was 6 months old). I have found them most satisfactory, though I have stopped using the disposable cellulose fillers for three reasons: (1) they are expensive; (2) they tend to disintegrate when wet, and stick to the baby's skin, thus obliging one to wash the baby at every nappie change; and (3) they are not sufficiently absorbent. Instead, I find that an ordinary small-size gauze napkin, folded to the appropriate shape, is most efficient, and when soiled, is easily washed. Since the supply of these containers is rather erratic I have begun making them myself, and find them very cheap and easy to construct.—MURIEL WOOLMAN. (Basle, Switzerland.)

Oral Treatment of Urinary Bilharziasis.—I have tried the effect of 'Nilodin' (B.W. & Co.), a preparation of 'Miracil D' in sugar-enteric-coated pills, in three proved cases of *Schistosoma hæmatobium* infestation. The dose régime was that recommended by the manufacturers—i.e., a total of 60 mg. per kg. body-weight given as 10 mg. twice daily for three days. One of the patients received two courses with a week between them; he discharged himself still passing ova in the urine. The second patient had only one course, and he too discharged himself with ova in the urine. The third patient, who is still in hospital, continued to pass ova after two courses, but was cleared after a course of 'Fantorin' (stibophen), which is sodium-antimony-bispyrocatechol-3 : 5 sodium disulphonate; this patient is now under treatment for the secondary anæmia only.

This confirms the observations of Alves (*Lancet*, 1950, i, 1134), and I must add that the sugar-enteric-coated nilodin pills are poorly absorbed in the Iraqi gut too.—Dr. M. FAWZI. (Department of Therapeutics, Royal College of Medicine, Bagdad.)

Protection of the Skin from Sunburn.—Dr. Russell and Dr. Anderson say in their article of Aug. 12 that there is no evidence that the anti-histamines by mouth are of use in eczema solare. Yet they seem to have missed the opportunity of putting this to the test in their case. Earlier this year I saw a case similar to theirs. The patient, also a civil servant, was 53 years of age and had become hypersensitive to sunlight in West Africa twenty years ago. I prescribed both 'Anthisan' 0·1 g. t.d.s. by mouth and as a light-screening agent *p*-aminobenzoic acid in paraffin (I asked for this substance in the hope that it would be obtained quicker than the reputedly more effective ethyl *p*-diethylaminobenzoate). However, there was a delay of 5 days in getting the substance; and during this time the anthisan cured the patient, who was able to resume work.—S. SHUBSACHS, M.R.C.S. (Manchester.)

Enuresis and Hypersomnia.—Dr. Ström-Olsen's case-reports, in his article of July 22, may lead to the idea that bedwetting in heavy sleepers who have no obvious signs of anxiety is secondary to the deep sleep. The enuresis and hypersomnia may be unconnected.

A girl, aged 6 years, had always wet the bed. She was a deep sleeper and was not conscious when raised at night to urinate. The family seemed a united one, and her mother had noted no symptoms of anxiety. In the 17th psychiatric interview she drew a scene from *Hansel and Gretel* which was interpreted to her in terms of her own aggressive feelings to her mother. She was indignant but only had two wet nights weekly for the next three weeks; and then only one wet night in six weeks. Her mother stated, however, that she still slept as heavily as ever.

A boy, aged 12 years, athletic, intelligent, jolly, and with many friends, had wet the bed since birth. His family seemed united and made no other complaints about him. He was a heavy sleeper and was raised by his parents twice nightly. He had received medical treatment for three years without benefit, and psychotherapy had no obvious effect on his behaviour or enuresis. It showed, however, that he had no overt anxiety; that he was reluctant to take responsibility; and that his expressed fantasies contained remarkably few female figures or symbols. In the course of treatment he developed erythema nodosum and was hospitalised. The ward-sister, forewarned, kept him dry for five weeks by raising him at increasing intervals during the night. He was then sent home with an alarm-clock, and his parents were told to delegate full responsibility for dry beds to him. He remained dry for two weeks and then relapsed. It was found that his parents had again resorted to lifting him as "he is too deep a sleeper to set the alarm for 5 A.M. after it has woken him at 11 P.M." They were discouraged from their over-indulgent attitude, and he was dry again for a further month, setting the alarm himself and waking to urinate. He relapsed again, completely, following a threat to send him to boarding-school if he refused to abstain from athletics following his attack of erythema nodosum. This new bout of wetting was accompanied by open defiance of his parents and small destructive acts.

The first case shows that cessation of bedwetting in a deep sleeper is not necessarily accompanied by lighter sleep. The second case shows how over-dependent enuretics with over-protective parents may use the excuse of deep sleep to serve their own ends.—RICHARD MEYER, M.R.C.P. (Hospital for Sick Children, Great Ormond Street, London, W.C.1.)

Patients' Travelling Expenses.—The changes in conditions under which travelling expenses may be paid (*Lancet*, Aug. 12, p. 273), will throw an added burden on the staffs of the National Assistance Board and chest clinics, and the financial saving will be paltry in the case of tuberculous patients. For many years free travel to and from sanatorium has been included in the tuberculosis service without regard to the income of the patient. The reintroduction of a means test in this connection is highly retrograde, and we even foresee the possibility of a patient's admission to sanatorium being hindered by the time taken by, and/or the result of, the National Assistance Board's inquiries. It would have been better if the Ministry had not made these changes without due regard to the special circumstances of the tuberculous, who often have to travel long distances for sanatorium treatment, and who by the time a vacancy is offered have usually suffered considerable financial reverses. The Minister recently voiced his concern at the grave problems involved in the treatment of tuberculosis, and we hope he will reconsider this additional difficulty he has imposed.—C. W. L. JEANES, M.R.C.S., chest physician, Greenwich; B. J. MALLEY, M.D., chest physician, Bermondsey; C. F. PRICE, M.B., chest clinic, Camberwell; E. K. PRITCHARD, M.R.C.S., chest physician, Southwark; J. P. V. RIGBY, B.M., chest physician, Deptford; J. E. STOKES, M.D., chest physician, Lewisham.

Endometrial Tuberculosis.—Within the past four months it has been stated (*Lancet*, 1950, i, 733, and Aug. 5, p. 220) that Mr. J. A. Stallworthy has achieved apparent cure in 5 of 6 patients treated with streptomycin, and that apparent cure is presumed after three consecutive negative tests at monthly intervals. The first is encouraging news; but I feel that, as pelvic tuberculosis is a blood-borne disease and the focal point must often be outside the field of gynæcology, the absence of lesions in biopsies for the short time of three months after treatment is not sufficient evidence of cure. In our smaller series biopsies and cultures have more than once been negative for more than a month in untreated cases.—MAGNUS HAINES, M.D. (Chelsea Hospital for Women, S.W.3.)

Psychiatric Social Worker.—I agree wholeheartedly with the opinions expressed in your annotation and by Dr. Sessions Hodge (Aug. 12). The skilled psychiatric social worker plays an essential part in the field of psychiatry, and her place cannot possibly be taken by those whose experience has been confined to administrative work. In the week when the Nottingham County Council's advertisement appeared, the B.M.A. annual conference devoted a session to the rôle of the psychiatric social worker, at which members deplored the shortage of trained workers and made suggestions for the most profitable use of the small number available. It was felt that the profession could not hope for the necessary expansion unless a reward was offered to some extent commensurate with the requirements of long training, high

personal qualifications, and arduous and exacting work. The existing negotiating machinery seems to be doing nothing to remedy the present anomaly in the salary scales. To perpetuate these conditions seems to be a strange policy for a Ministry whose professed aim is to base a complete National Health Service upon highly qualified and skilled personnel.—DESMOND CURRAN, F.R.C.P. (St. George's Hospital, London, S.W.1.)

Origins and Outcomes of the Patient's Stay in Hospital.—The final section of the article by Miss Addiscott and her colleagues (Aug. 26) suggests that the almoner may make the patient aware of her critical attitude towards his habits in such a way as to cause resentment. But in fact one of the main objects of her training is to enable her to establish a good relationship with her patient as the basis of her social therapy. The question of criticism, overt or implied, seldom arises; but where it does, the good contact established should enable the patient to absorb and act upon the almoner's suggestions for his welfare without the resentment which would be as disastrous to the almoner-patient relationship as to that between doctor and patient.—MARY W. WINDSOR, A.M.I.A.; ELIZABETH ALEXANDRE, A.M.I.A. (Manchester Royal Infirmary.)

Ways into General Practice.—Your leading article of Aug. 26 says that the easiest path to the status of principal is by preliminary assistantship. The *British Medical Journal* of Sept. 2 contains two advertisements of vacancies for assistantship with view and twelve advertisements from practitioners requiring an assistantship with view. Inquiry at the Medical Practices Advisory Bureau would also show that there are many more applicants than openings. You say that "the chances of getting into practice seem rather less bleak than they have sometimes been painted." This may be so, but it is unsatisfactory that they should be bleak at all, in view of statements on behalf of the Government that the entry into general practice would be facilitated by the Health Service. In fact it has been made more difficult; and a real effort should now be made to fulfil the promise.—YOUNG DOCTOR.

Inoculation Certificates Required Abroad.—The British Overseas Airways Corporation has the most up-to-date information in this country on the requirements of various governments regarding certification of vaccination and inoculation needed by travellers by air. This information is obtained from the World Health Organisation's *Weekly Epidemiological Record* and daily broadcasts, the Ministry of Health's weekly return of infectious diseases, and day-to-day reports from the Corporation's agents throughout the world. I support your footnote to the letter from Sir Philip Manson-Bahr (July 22), to the effect that doctors requiring up-to-date information on this matter should apply to the Medical Department, British Overseas Airways Corporation, Stratton House, Piccadilly, W.1. (Tel.: Mayfair 6611), or to the representatives in the U.K. of the countries which the traveller intends to visit or transit.—Sir HAROLD WHITTINGHAM, F.R.C.P., director of medical services, B.O.A.C.

An Unconscionable Time A-dying.—The happily entitled article by Dr. Jackson in your issue of Aug. 26 recalls an experience this year in a staggeringly expensive nursing-home.

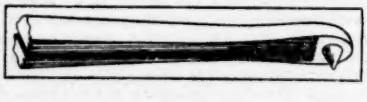
I was awakened by a choking sensation and an overpowering stench. Knowing that large industrial concerns were fairly near I thought "an explosion" and struggled from bed to shut the window, from which I imagined the fumes must be entering. Worse ensued however. Knowing that bell-ringing produced negative results, I emerged again to reopen and lean out of the window. That was better, and after a time it struck me that some over-fumigation process must be going on nearby. True enough: a patient had died and the bed was urgently wanted, so combined sulphur and formaldehyde had been decided upon to hasten the process. Next day the staff seemed pained to think that their zeal had not been appreciated, quoting quite recent textbooks on the subject of disinfection.—ESTHER CARLING, M.D. (Northwood, Middlesex.)

Notes and News

Goeffaerts Gastrectomy Clamp

Mr. Geoffrey Parker, F.R.C.S., writes: Many British surgeons in the later stages of the war enjoyed the hospitality of Dr. Goeffaerts, of Alost, in Belgium, and admired his effortless technique. His untimely death, on the eve of his appointment to a surgical chair, deprived Belgium of one of her finest operators and teachers.

The clamp that I use in subtotal gastrectomies (made by John Bell & Croyden Ltd., London, W.1.) was designed by Dr. Goeffaerts. It is essentially a large-size Payr clamp with a longitudinal groove through each blade (see figure). It is applied in the usual way at the site determined for cutting across the cardiac end of the stomach. The distal portion of



the stomach is closed with a straight Doyen's clamp to prevent soiling and cut away. Interrupted linen thread sutures are then passed through the slits in the blades and tied off, and the ends are cut short. The clamp can be removed before or after inserting the outer layer of sutures of the anastomosis to the duodenum or jejunum. After its removal, the part of the stomach to be used for the anastomosis is kept closed with straight Kocher forceps while the part not so required is closed with a second layer of continuous or interrupted sutures. The anterior layers of the anastomosis are inserted as usual; a Hofmeister valve, if required, is made by fixing the proximal jejunum with interrupted sutures along the line of the closed portion of the stomach. In over 100 consecutive gastrectomies where this clamp has been used I have had no postoperative bleeding from the anastomoses, in spite of the attempts of enthusiastic house-surgeons to relieve non-existent hæmorrhage and distension with gastric suction. All the patients took unrestricted fluids by mouth 12 hours after operation, the only proviso being that they must drink from a teaspoon to avoid too rapid filling of the gastric stump.

Notifications of poliomyelitis in the week ended Sept. 2 were: paralytic 302 (previous week, 369); non-paralytic 189 (220); total 491 (589). The only counties showing more than average increases were Kent and the West Riding.

At the University of Edinburgh on Oct. 9, 10, and 11 Mr. Norman Tanner will give three lectures on the Surgical Treatment of Peptic Ulcer. On Oct. 13 Dr. Philip S. Hench, of the Mayo Clinic, will speak on the Present Status of Cortisone and A.C.T.H. in General Medicine. All these Macarthur lectures will be given in the anatomy lecture-theatre, University New Buildings, at 5 P.M.

The following have been admitted to the fellowship of the Royal Faculty of Physicians and Surgeons of Glasgow qua physician: John Colvin, R. J. Cuthbert, J. C. C. Kelly, R. J. Mewilliam, S. S. Meighan, Jr., J. McC. Murdoch, G. B. Shaw.

On Friday, Sept. 22, at 11 A.M., at the University of Liverpool, the Biochemical Society is holding a symposium on the Biochemistry of Fish.

Dr. Leonard Colebrook, F.R.S., and Dr. J. P. Bull will speak at a symposium on burns which the National Research Council is holding in Washington, at the request of the Department of Defense, on Nov. 2, 3, and 4. Those wishing to attend should notify the secretary of the division of medical sciences of the council, 2101, Constitution Avenue, Washington, 25, D.C., U.S.A.

The Medical Research Council invite applications from recently qualified men or women with one or two years' experience in hospital appointments for a studentship (£500 p.a.) for training in methods of experimental psychology, tenable at the psychological laboratory, University of Cambridge for not less than one year. Application forms, to be returned before Oct. 1, may be had from the secretary of the council, 38, Old Queen Street, London, S.W.1.

The chief medical officer of the Ministry of Health has sent to all general practitioners a list of proprietary medicines which are advertised direct to the public. Following the report of the joint committee on prescribing (*Lancet*, July 8, p. 66) he has asked doctors to try to avoid prescribing any of the substances on the list "unless, in your professional judgment, you feel clear that there is some special justification for doing so in any individual case."

The Charity Commissioners propose to establish a scheme for the regulation of the Benevolent Medical Society of Essex and Hertfordshire. The scheme can be seen at 2, Parliament Square, Hertford, and copies can be bought at the office of the commissioners (2*s.* 2*d.*). Objections or suggestions may, within 21 days, be sent to the secretary of the commission, Ryder Street, London, S.W.1.

The classification of junior hospital posts as "A," "B2," or "B1" is to be discontinued from Sept. 30.

The National Institute for the Deaf has published a new approved list of manufacturers and suppliers of deaf-aids who have entered into an agreement with the institute as to their methods of trading. The list (price 3*d.*) may be had from the institute, 105, Gower Street, London, W.C.1.

A sample investigation shows that it takes on an average 35·75 minutes to fit and supply a pair of spectacles, under the National Health Service (Report of Working Party: Part II. H.M. Stationery Office. Pp. 36. 1s.). To dispense a pair for a private patient took 45·47 minutes. The ratio of repairs to new glasses is about 11%, but as most of the N.H.S. glasses are at present new it is thought that this will probably increase to about 16%. Repairs take an average of 9·74 minutes.

The British Epilepsy Association, founded in July as a memorial to Dr. Tylor Fox, met on Sept. 5 with Lady Cynthia Colville in the chair. Its aims include the general education of the public and the more specialised education of those in charge of epileptic children, the creation of an information and advisory service, and assistance in establishing hostels and convalescent homes. On the provisional council are Sir Charles Symonds, Dr. Russell Brain, Dr. Macdonald Critchley, Dr. Letitia Fairfield, and Dr. Denis Williams.

The fourth reunion of the 2nd British General Hospital in the 1939–45 war will be held on Saturday, Oct. 7, at Simpson's Restaurant, Strand, London, W.C.2. Tickets may be had from Dr. J. H. Easton, 25, Biddenham Turn, Bedford.

The responsibilities of the veterinary profession should not stop at the farm gate, declared Mr. John Bruford in his presidential address to the National Veterinary Association at Cardiff on Sept. 6. To ensure cleaner food, he held that the veterinary surgeon should have authority to inspect it up to the time it is bought by the housewife.

During 1949 the number of voluntarily registered disabled persons rose by 27,000 to over 935,000, of whom 131,813 were pensioners of the 1914–18 war and 415,021 were other ex-Service men and women. (Annual Report of the Ministry of Labour and National Service for 1949. H.M. Stationery Office. 4s.)

ACADEMICAL AND EDUCATIONAL

Royal College of Surgeons of England: 24 surgery lectures and 10 clinical conferences, Sept. 28–Oct. 13, at selected hospitals. Fees (whole course 12 gns.; lectures only 8 gns.) with application to Secretary, Postgrad. Education Committee, R.C.S., Lincoln's Inn-fields, W.C.2.

Institute of Urology, St. Peter's Hosp., W.C.2: Postgraduate course in V.D., Oct. 3–Nov. 30. Fee 12 guineas (with application).

Maida Vale Hospital: Neurological teaching session for postgraduates, Oct. 2–Dec. 22. Clinical demonstrations every Friday from Oct. 13–Dec. 15 at 5 P.M.

Institutes of Child Health & Neurology: Postgrad. lectures at National Hospital, Queen-square, 5 P.M., Mondays, Oct. 16–Dec. 18, on neurological diseases in children. Fee (3 gns.) with application to Secretary, Inst. of Child Health, Hospital for Sick Children, W.C.1.

Tuberculosis Educational Institute: 3-day clinical courses: Aintree, Liverpool (starts Oct. 25); Godalming, Surrey (Oct. 17 and Nov. 21); Market Drayton, Salop (Oct. 11, Nov. 8, Dec. 13); Tor-na-Dee, Aberdeen (Oct. 11). Fees 3 gns. Apply Secretary, Tavistock House North, W.C.1.

Aberdeen Univ.: Anatomy Lectureship. Apply by Oct. 2.

Chester Beatty Research Institute: Research post (mainly avian tumour viruses). Apply Secretary, Royal Cancer Hospital, S.W.3, by Sept. 30.

Alfred Adler Medical Society: Training course psychotherapy. Apply Hon. Secretary, Institute of Individual Psychology, 9, Fellows-road, N.W.3.

Liverpool University: Whole-time Gynæcology Tutor (non-res.). Salary £600–£1400. Apply to Registrar by Sept. 25.

Liverpool University: Whole-time course advanced obstetrics and gynæcology. Dec. 4–16. Fee 10 gns. Apply Dean, Faculty of Medicine by Oct. 21.

Guy's Hospital: 2 Junior Pharmacology Lectureships. Apply by Oct. 4.

LIST OF HOSPITAL VACANCIES

Albert Dock Orth. & Frac., E. 16.—H.S. (B2).

Central Middlesex, N.W.10.—H.O. (B2), pæd.; H.O. (A/B2), gen. med., hæma. & endocrin.; H.O. (B2), T.B.; H.O. (A/B2), gen. med. and cardio.; H.O. (A/B2), gen. & neurosurg.; Jr. Reg., (B1), path.; H.O. (B2), gen. med. & neurosurg.; Jr. Reg. (B1), cas.

East End Maty., E.1.—Jr. Obst. O. (B1).

Elizabeth Garrett Anderson, N.W.1.—Obst. Asst. (A/B2).

German, E.8.—Jr. Reg. Anæs. (B1), cas.

Guy's & York Clinic, S.E.1.—Asst. Phys. Psych. Med.

Hackney, E.9.—H.S. (A/B2), E.N.T. & cas.

Hampstead General, N.W.3.—H.S. (B2); Cas. O.s (B2).

Hospital for Sick Children, W.C.1.—Jr. Anæs. Reg. (B1); H.P. (B1); H.S. (B1).

Lambeth, S.E.11.—Sr. H.P. (B2).

London Jewish, E.1.—Sr. R.M.O. (B1); H.S.

Miller Gen., S.E.10.—Anæs. (B2).

Prince of Wales's Gen., N.15.—C.O. (B2).

Royal Cancer, S.W.3.—H.S. (B2).

Royal Northern, N.7.—Orth. H.S. & C.O. (B2).

St. Anne's Gen., N.15.—H.P. (B2).

St. Leonard's, N.1.—H.S. (A/B2); H.P. (A/B2).

St. Olave's, S.E.16.—Reg. in Anæs.

South Western, S.W.9.—H.S. (A/B2).

West London, W.6.—Jr. H.M.O. (B1), cas.

Victoria Hosp. for Children, S.W.3.—H.P. (A).

Provincial

Ashford, Kent. Willesborough.—H.P. (B2), med. & O.P.

Altrincham. St. Anne's E.N.T.—H.O. (A/B2).

Ashton, Hyde, & Glossop H.M.C.—Reg. (B1), chest dis. & T.B.

Ashton Infy. & Lake Hosp.—Orth. H.S. (A/B2).

Ashton-u-Lyne Dist. Infy.—H.S. (A/B2), Male.

Aylesbury. Tindal Gen.—H.P.s (A/B2).

Barrow-in-Furness. North Lonsdale.—H.S. (A/B2).

Batley & Dist. Gen.—H.O. (A/B2).

Bebington. Clatterbridge Gen.—H.S. (A/B2), orth.

Bedford Gen.—H.S. (B2).

Billericay. St. Andrew's.—Obst. Reg. (B1); H.S. (B2).

Birmingham 18. Dudley Road.—Jr. Reg. (B1), E.N.T.

Birmingham. Dudley Road Infy.—Jr. H.M.O. (B1).

Birmingham. Hollymoor.—Locum Reg.

Birmingham. Hollymoor.—Jr. H.M.O.(B1).

Birmingham Maty.—H.S. (B2).

Birmingham Accident.—H.S. (A/B2); Sr. Reg.

Birmingham. Royal Orth.—H.O. (B2).

Bristol. Frenchay.—H.S. (A/B2), neurosurg.

Barnet Gen.—Jr. Anæs. Reg.

Bishop's Stortford. Haymeads.—H.O. (A/B2), med.

Bowden St. Anne's E.N.T.—Jr. E.N.T. Reg. (B1).

Braintree. Black Notley.—Reg. (B1), pulmonary T.B.; Orth. H.O. (A/B2); H.P. (A/B2).

Brighton, 7. Sussex Eye.—Sr. H.S. (B2).

Brighton & Lewes H.M.C.—2nd H.S. (A/B2), E.N.T.

Bridgend. Morgannwg (Mental).—Jr. Reg. (psychiatry).

Bristol. Frenchay.—H.S. (A/B2), neurosurg.

Bristol. S. Western R.H.B.—Reg. (B1), Blood Transfusion Service.

Bristol United & S. Western R.H.B.—Cons. Genito-urinary Surg.

Bromsgrove. All Saints.—H.S.s; H.P.

Bradford Royal Infy.—Reg. (B1), orth.

Bideford & Dist.—H.O. (B2).

Beverley, Yorks. Westwood.—H.S. (A/B2).

Bury St. Edmunds. W. Suffolk Gen.—H.S. (A/B2), cas. & orth.; H.S. (B2), gyn. & obst.

Burnley Gen.—H.O. (A), surg.; Jr. E.N.T. Reg. (B1).

Burnley. Victoria.—H.S.; Jr. Ophth. Reg.; Orth. H.S.

Burnley. Bank Hall Maty.—Obst. O. (B2).

Bury Gen.—C.O. (B2); H.S. (A/B2).

Cardiff United.—Reg. (radiotherapy); H.S.s (orth. & radiotherapy).

Carmarthen. W. Wales Gen.—H.S. (A/B2).

Castleford, Normanton & Dist.—R.S.O. (B1), Jr. Reg.

Chartham Down. St. Augustine's.—Jr. M.O. (B1).

Chelmsford & Essex & St. John's.—H.S. (B2), Special Depts.

Chelmsford. St. John's.—Jr. Med. Reg. (B1).

Chelmsford. Broomfield.—Med. Reg.

Chelmsford & Essex.—H.P. (A).

Cheltenham Gen. Eye & Children's.—R.M.O. (B2).

Chester. City Hosp. & Royal. Infy.—Med. Reg. (B1), gen. med. & cardiac.

Chester Royal Infy.—Jr. H.M.O. (B1), orth., cas.

Chorley & Dist.—Surg. Jr. Reg. (B1).

Colchester. Royal Eastern Counties.—Sr. Reg. (B1); Jr. H.M.O.s.

Coventry & Warwickshire.—Reg. (gyn. & obst.); H.S. (A/B2), Central Accid. Unit.

Canterbury. Kent & Canterbury.—H.S. (B2), E.N.T. & E.

Cambridge. Addenbrooke's.—Sr. Reg. (Radiotherapeutic Centre).

Darlington Mem.—C.O. (A/B2).

Davyhulme. Park.—Obst. H.O. (A/B2); Med. Reg. (B1).

Dewsbury & Dist. Gen. Infy.—H.S. (A).

Dudley. Guest.—H.S. (A/B2); C.O. (A/B2).

Eccles & Patricroft.—H.O. (A/B2).

Epsom. Horton.—H.P.

Enfield. Chase Farm.—H.S. (A), gen. surg.

Exeter. Royal Devon & Exeter.—C.O. & H.S. (A/B2), E.N.T.

Exeter. Princess Elizabeth Orth.—H.O.s (A/B2), Male, orth. & frac.

Griffithstown County.—Jr. H.M.O. (obst. & gyn.).

Grimsby Gen.—C.O. (B1), Jr. Reg.

Guildford. Royal Surrey County.—Gyn. H.S. (A/B2).

Gloucester. S. Western R.H.B.—Med. Dir. (Mass Radiogr. Unit.).

Halifax Area H.M.C.—H.P. (A/B2).

Halifax Gen.—H.S. (B2).
Halifax Royal Infy.—Jr. Reg., (cas. & orth.); H.P. (B2), Male.
Hailsham. Hellingly Mental.—H.O. (A/B2).
Harrogate. Royal Bath.—R.M.O. (B2).
Hastings Group H.M.C.—H.O. (A/B2), med., Female.
Haverfordwest. Pembroke Cty. War Mem.—R.S.O. (B1); H.S. (A/B2).
Hemel Hempstead. West Herts.—C.O. & H.S. (A/B2).
Heswall, Cheshire. Cleaver.—Jr. H.M.O. (B1).
High Wycombe War Mem.—H.O. (B2), surg.
Huddersfield Royal Infy.—Radiol. Reg. (B1); Jr. Reg. (B1), E.N.T.; Jr. Reg. (B1), cas.
Hull Royal Infy.—Orth. H.S. (B2); E.N.T. H.S. (A/B2).
Hull. Victoria Hosp. Sick Children.—H.P. (A/B2).
Hull. Victoria Hosp. Sick Children.—H.S.s (A/B2).
Hounslow.—H.S. (B2), Special Depts.
Hereford Gen.—H.P. (A/B2); H.S. (B2), cas., E.N.T. & frac.
Isleworth. West Middlesex.—Phys.
Isleworth. West Middlesex.—Ophth. Surg. (Cons.).
Ipswich Isolation.—H.O. (A/B2).
Kettering Gen.—H.S. (A/B2), traum. & orth.
Lanchester, Durham. Maiden Law.—H.S. (A/B2), E.N.T.
Leamington. Warneford Gen.—H.S. (B2), E.N.T. & ophth.; H.S. (A).
Llanelly.—Jr. H.M.O.s (gen. surg. & gyn., med. & anæs., E.N.T. & ophth.).
Liverpool. Royal L'pool Childrens.—Med. Reg. (City Branch).
Liverpool 20. Bootle Gen.—H.S.; H.P.; C.O.; (A/B2 posts).
Macclesfield. Parkside.—Psych. Reg. (B1).
Macclesfield & Dist.—Anæs. Reg. (B1).
Macclesfield. Infirmary Boh.—Jr. Surg. Reg. (B1); Anæs. Reg. (B1).
Maidstone. Lenham San.—R.M.O. Reg. Locum.
Maidstone. West Kent Gen.—C.O. (A); H.S.s (B2); H.P.s (B2).
Manchester R.H.B.—Cons. Asst. Radiol.
Manchester R.H.B. (Rochdale Hosp. Centre).—Cons. Anæs.
Manchester R.H.B.—Anæs. (Sr. H.M.O.); Asst. Radiol. (Sr. H.M.O.).
Manchester United.—R.M.O. (B1), Reg. or Jr. Reg.; Regs. (diag. radiol.).
Mansfield & Dist. Gen.—Sr. H.S. (B2), accid. & orth.; H.S. (A/B2).
Morpeth, N'thumb. St. Mary's.—Sr. Reg. (B1).
Middlesbrough. West Lane.—H.O. (A/B2).
Middlesbrough Yorks. N. Riding Infy.—Locum Asst. Anæs.
Newcastle. United.—Ophth. Surg.
Newcastle. Royal Victoria Infy.—M.O. (Sr. Reg.).
Newcastle R.H.B., Hartlepools Group.—Reg. (orth.).
Newcastle R.H.B., Wansbeck Group.—Cons. Asst. Surg.
Newcastle R.H.B., E. Cumberland.—Surg. Reg.
Newport. Royal Gwent.—H.O. (derm. & V.D.); H.O. (A/B2), orth.; H.O. (A/B2), E.N.T. & ophth.
Nottingham Gen.—Jr. Aural Reg.; Orth. Reg. (accid. & orth.); Aural H.S. (A).
Nottingham. City.—H.S. (A/B2); Jr. Reg. (B1), thor. surg.; Pæd. H.P. (B2); H.P. (A/B2).
Nottingham. Firs Maternity.—Obst. H.S. (B2).
Northampton Gen.—Sr. Anæs. Reg. (B1).
Norwich. W. Norwich & Isolation.—H.P. (A/B2).
Nuneaton Hospitals.—H.S. (gyn. & obst.).
Nuneaton. Manor.—H.S. (A/B2).
Old Windsor.—H.P. (A/B2), pæd.
Pontefract Gen. Infy. & The Hydes.—R.S.O. (B1), Jr. Reg.; H.P. (A); H.S. (A).
Portsmouth. St. Mary's.—H.S. (A), Male.
Potters Bar & Dist.—H.O. (A/B2), med. & surg.
Preston Royal Infy.—Orth. H.S. (A/B2).
Preston Royal Infy.—Anæs. H.O. (B2); Jr. Reg. (B1), orth. & traum.; Jr. H.O. (A/B2), orth. & traum.
Peterborough Mem.—H.S. (A/B2).
Plymouth. S. Devon & E. Cornwall.—H.S. (B2), obst. & gyn.
Pendlebury. Royal Manchester Childrens.—H.P.s (B2).
Pontypridd. Church Village Gen.—Reg. (surg.); H.O. (B2), surg.; H.O. (A), med.; Reg. (diag. X-ray); Reg. (anæs.).
Reading H.M.C.—Reg. (B1), E.N.T.
Rochdale. Birch Hill.—Obst. & Gyn. H.S. (A/B2).
Rochford Gen.—H.S. (A/B2).
Rhondda. Porth & Dist.—Jr. H.M.O. (surg.); H.O. (A), mainly surg.
Rotherham. Moorgate Gen.—Jr. H.M.O. (B1), pæds. & med.
Rugby. Hospital of St. Cross.—H.P. (A/B2).
Salisbury Gen.—H.S. (A/B2); H.P. (A/B2); Jr. Reg. (E.N.T.).
Scotland Northern R.H.B.—Sr. Reg. Anæs.
Sheffield. Children's Hosp. Unit.—H.S.s (A/B2).
Sheffield R.H.B.—Asst. Psych. (Harmston Hall); Cons. Orth. Surg. (Barnsley Rotherham and Mexboro'.)
Sheffield. Jessop Hosp. for Women.—Jr. Reg. (path.).
Sheffield. Royal Infy. Unit.—Sr. Med. Reg. (B1).
Sheffield. Royal Infy. Unit.—Reg. (B1), clin. path.
Shrewsbury. Royal Salop Infy.—Orth. H.S. & C.O. (A/B2).
Southampton Borough Gen.—H.S. (A/B2).
Southampton Children's.—H.O. (A/B2).
Southampton. Royal S. Hants & So'ton.—H.P. (A/B2).
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Slough. Upton.—H.S. (A/B2).
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Stamford & Rutland.—C.O. & H.P. (A); H.S. (B2).
Stourbridge. Corbett.—H.P. (A/B2); C.O. (A/B2).
Taunton. Musgrove Park.—Sr. H.S. (B2), gyn. & obst.
Taunton. Tone Vale.—Sr. Med. Lab. Tech.
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Tilbury & Riverside Gen.—Jr. Reg. (orth. & acc.), Tilbury; H.P. (B2), Tilbury; Obst. H.S. (B2), Orsett.
Tunbridge Wells Dist.—H.S. (B2); H.S. (A), orth.
Uxbridge. Hillingdon.—H.P. (B2), Male.
Wakefield. Stanley Royd.—Regs. in Psychiatry.
Wakefield Gen.—Obst. & Gyn. H.S. (B2).
West Bromwich & Dist. Gen.—Anæs. & H.S. (A/B2).
Wigan. Royal Albert Edward Infy.—H.S. (A/B2).
Winchester. Royal Hants County.—H.P. (A/B2), pæds.; Anæs. (A/B2).
Windsor. King Edward VII.—Jr. Reg. (B1).
Woking. Victoria.—R.M.O. (A).
Wrexham & E. Denbighshire War Mem.—H.P. (A/B2).
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Watford. Peace Mem., Shrodells, King St. Maty.—Cons. Pæd.
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Birmingham City.—A.M.O.H. (gen. purposes).
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Board of Control. Rampton Hosp.—Jr. Reg. (Depy. Med. Supt.), Cons.
Board of Control. Moss Side Hosp.—Locum M.O.
Essex C.C. Saffron Walden B.C. & R.D.C.—M.O.H. & Asst. C.M.O.H.
Grantown-on-Spey, Moray.—Factory Doctor.
Gloucestershire C. C.—Sr. Asst. County M.O.H.
H.M. Colonial Service, British Guiana.—Health Officer (Female).
Ministry/Pensions. Leeds, Chapel Allerton.—Surg. O.s (B1), Sr. M.O.
Ministry/Pensions. Worcester, Ronkswood.—Surg. O. (B1).
Ministry/Pensions. Qn. Mary's (Rochampton).—Jr. M.O. (B1).
Ministry/Pensions. Aylesbury, Stoke Mandeville.—Surg. O. (Plastic Surg. & Jaw Unit).
Middlesex C.C. Area 9.—A.M.O.
Northumberland C.C.—A.C.M.O.H. (maty. & c.w.).
Rugby, Warwick.—Factory Doctor.
Stanford le Hope, Essex.—Factory Doctor.
Somerset C.C.—Asst. County M.O.H.

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Yorkshire, West Riding. Castleford.—Urban. List 600.

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